

Amendments To The Specification:

At page 4, between lines 28 and 29, please insert the following heading:

--Brief Description of the Drawings--

Please replace the paragraph beginning at page 6, line 25, with the following rewritten paragraph:

B1
--In the configuration described in Figure 2, there is no adsorbent regeneration. It is evacuated or upgraded, or stabilised then discharged. The scope of the invention also encompasses a further embodiment in which all or at least a portion of the adsorbent from the dust collector (electrostatic filter) is regenerated, for example in a filter reactor (not shown in Figure 2) or using any technique that is known to the skilled person. The regenerated adsorbent can then be returned to the generator via to the injectors (113). With respect to an apparatus with no regeneration, this solution can envisage introducing fresh adsorbent only in the form of periodical makeup of a small quantity of product; thus, the consumption of fresh adsorbent is substantially reduced.--

Please replace the paragraph beginning at page 7, line 16, with the following rewritten paragraph:

B2
--The heat generator comprises a substantially parallelepipedal combustion chamber (201) provided with one or more head burners (202). The fumes leave the combustion chamber (201) via opening (203) and penetrate into rectangular cross sectional space (204), this space being created by membranous walls identical to those that constitute the remainder of the heat generator. Fresh or regenerated adsorbent is introduced into space (204) via injector or injectors (205), which can be in the form of a substantially horizontal injection slope. An apparatus (206) such as a venturi tube or the like can be placed upstream, at the location of or downstream of the injection apparatus to ensure rapid and homogeneous mixing of the adsorbent with the fumes to be treated. The fumes then penetrate into the desulphurisation apparatus proper which, as indicated in FR-A-2 748 402, can be a simple substantially cylindrical volute with the same width as space (204). In the volute, the adsorbent is gradually separated from the fumes by centrifugal force. At the end of the volute, a wall (208) can separate the gas/adsorbent stream into two portions, one rich in

adsorbent at the periphery, and a portion that is depleted in adsorbent at the centre. The adsorbent-rich portion penetrates into space (209) for recycling to the inlet to the space (204).

B2 The movement of the gas/adsorbent mixture in space (209) can be caused or encouraged by ejectors or the like (210), these ejectors being supplied with vapour or recycled fumes taken from the final dust collector, or any other fluid. An apparatus (219) such as a venture tube can be placed within space (209) to provide mixing. The connection (211) between space (209) and space (204) can be arranged to create a suction effect in said space (209) due to the fumes from the combustion chamber. The adsorbent-depleted fumes leave the desulphurisation apparatus (207) via line(s) (212) and then penetrate into the convection exchange zone (213). They then rejoin the final dust collector (214).--

Please replace the paragraph beginning at page 8, line 4, with the following rewritten paragraph:

B3 -- Preferred conditions for carrying out desulphurisation to implement the present invention have been determined. The mean temperature in the desulphurisation apparatus is generally in the range 500°C to 1300°C. It is preferably in the range 800°C to 1110°C ~~110°C~~ if desulphurisation is carried out with lost calcitic adsorbents, while it is in the range 700°C to 1000°C for regeneratable adsorbents. Further, the adsorbent flow rates are such that the concentration of solids in the fumes, excluding recycling, is in the range 0.1 to 1000 g/Nm³, preferably in the range 1 to 100 g/Nm³. Advantageously, the gas recycle rate in the apparatus is in the range 1% to 50%, preferably in the range 10% to 50%, and the adsorbent recycle rate (i.e., the ratio between the flow rate of the recirculating adsorbent and the flow rate of the fresh or regenerated adsorbent) is in the range 1 to 50, preferably in the range 2 to 10. Under optimum functioning conditions, the grain size of the adsorbents is in the range 0 to 1000 microns, for example 0.1-1000 microns, preferably in the range 5 to 50 microns. Finally, the density of the adsorbent particles is advantageously in the range 100 to 5000 kg/m³, preferably in the range 1000 to 2500 kg/m³.--